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REPORT

to the

Montana Livestock Sanitary Board

July 1, 1964 through June 30, 1965

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Helena, Montana

August 16, 1965

The Honorable Tim Babcock
The Governor of Montana
State Capitol Building
Helena, Montana

My dear Governor:

In compliance with Section 46-242, RCM 1947, we transmit herewith the report of the State Veterinarian to the Montana Livestock Sanitary Board for the year July 1, 1964 through June 30, 1965.

Respectfully submitted,

MONTANA LIVESTOCK SANITARY BOARD

J. W. SAFFORD
Executive Officer and
State Veterinarian

MONTANA LIVESTOCK SANITARY BOARD

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JOHN W. SAFFORD

Executive Officer

and

State Veterinarian

Helena, Montana

July 1, 1965

Hon. Livestock Sanitary Board
Helena, Montana

Dear Sirs:

In compliance with Title 46, Section 242, RCM 1947, I submit the report of the Executive Officer and State Veterinarian to the Livestock Sanitary Board for the year ending June 30, 1965.

There were five meetings of the Livestock Sanitary Board during the year.

A meeting was held at Many Glaciers on July 15, 1964.

A meeting was held in Helena on October 1, 1964.

A meeting was held in Helena on January 5, 1965.

A meeting was held in Helena on March 5, 1965.

A meeting was held in Billings May 29 and 30, 1965.

At these meetings the varied activities and responsibilities of the Livestock Sanitary Board were discussed and acted upon. All actions taken, and regulations and orders issued by the Executive Officer in the interim between meetings, were approved.

The complete minutes of all meetings are on file in the office of the State Veterinarian at the Livestock Building, Capitol Station, in Helena.

A study of the disease, laboratory and meat inspection compilations made in this annual report would indicate that, comparatively speaking, Montana is the healthiest place in the world to raise livestock. The absence of devastating diseases of animals this past year is striking. Livestock production is so essential to the economy of Montana, so important as a source of essential food to a great nation with an expanding population, and so basically necessary to utilize the state's great resources of grass and abundance of water, that we dare not take chances with livestock diseases that have the continual potential of wiping out such an industry or making it so unprofitable it could not exist. We must continue to utilize every scientific development and tool available in the fight against diseases of livestock to not only prevent their introduction and spread but to reduce the annual multi-million dollar losses sustained from a combination of insidious disease.

We wish to call to the attention of the Livestock Sanitary Board the reports on two extremely important functions of the Board -- the work of the Dairy and Milk Inspection Division and the Slaughterhouse and Meat Inspection Division. Basically, it is essential the livestock producing milk, butter and meat for human consumption be healthy to assure safe food products.

Great efforts are made to control and eradicate livestock diseases to provide a healthy industry by the Veterinary Medical profession, by the Livestock Disease Control Division and by the Laboratory Division of the Board. Such foods, because of their perishable nature, must be handled, prepared and distributed under the most sanitary and ideal conditions if consumers -- from small babies to elderly people -- are to be sure their health will not be jeopardized. As the population increases, as food preparation and distribution centers become more concentrated, more complex and more massive, the assignments by the people of Montana to the Livestock Sanitary Board to assure them safe food products of animal origin become even more complex and important. Milk plants and dairies must continue to improve sanitary practices to assure safe products under ever increasing complexities of modern milk-distribution practices. Carelessness in modern processing and distribution systems has such a potential of effecting so many more lives as ever before known that no chances can be taken. The number of pounds of meat in Montana found unfit for human consumption this fiscal year -- 1,074,717 pounds of potentially dangerous meat -- speaks more eloquently than words the importance of the functions of the meat inspection system functioning in Montana. Modern technology in food production will require continual study and improvement of methods of dairy, milk and meat inspection if the people are to have safe milk and meat products and if the excellent consumer confidence in these products is to be maintained.

Improper sanitation in handling food products of animal origin and diseases in animals that provide these foods results in a great deal of waste and economic loss because they are dangerous to human health and must be removed from food channels. Ways must be found to eliminate the diseases and unsanitary practices responsible for these losses.

The reports that follow represent the work of many veterinarians and members of the full-time and part-time staff of the Livestock Sanitary Board. We sincerely hope their work has resulted in making Montana a safer place to raise livestock and a place where food of animal origin can continue to be consumed with confidence that it is healthful, wholesome and nutritious.

LIVESTOCK DISEASE CONTROL DIVISION

Cattle Diseases

Montana veterinarians reported 40 cattle diseases involving 27,164 cattle on 5,950 ranches. This is a decrease of 10 diseases, an increase of 2,113 cattle and a decrease of 597 ranches from the previous year. The Montana veterinarians' disease report, the laboratory and meat inspection reports contained in this annual report reflect the actual disease situation of the livestock in Montana this past year.

ANAPLASMOSIS -- A total of 269 cases of anaplasmosis on 130 ranches was reported during the fiscal year. This is about twice the number of cases and three times the number of ranches reported in the fiscal year 1964. The occurrence of the disease while the cattle are on summer and fall range makes it most difficult to obtain figures on actual losses. The marked increase in number of cases reported reflects that losses in the enzootic area were severe, especially during the summer and fall of 1964.

Meetings were held with entomologists, veterinarians and others familiar with insect vector-transmitted diseases during the year to determine if practical procedures could be applied to help reduce anaplasmosis losses. No procedure could be devised that could be applied to Montana range conditions.

During the year it has been announced by Dr. W. E. Brock and his associates at the College of Veterinary Medicine, University of Oklahoma, that they had developed an anaplasmosis vaccine. Their field trials indicated that the vaccine would not prevent the animals from becoming infected or from becoming carriers but did reduce death losses to zero. It has been further announced that a commercial company will manufacture the vaccine with the hope it will be available the fall of 1965. If the vaccine proves as beneficial in reducing losses in Montana as it did under field trials in Oklahoma, it will be most worthwhile for use in Montana's anaplasmosis enzootic area. It is hoped the vaccine will reduce losses until ways can be determined to eliminate the disease.

We urgently recommend to the Board that a minimum of three field trials be established in three herds in the enzootic area to determine the efficacy of the use of the Oklahoma anaplasmosis vaccine in reducing losses in Montana. This could be started during the winter of 1965-66 and results could be determined by the fall of 1966. It is essential that this be done in order to know if the vaccine is worthwhile.

ANTHRAX -- For the first time since 1960 no anthrax was reported during the year. We believe the application of good control procedures on outbreaks has been partly responsible for nonrecurrence during the year.

BACILLARY HEMOGLOBINURIA -- Ninety-eight cases were reported on 79 ranches during the year in western Montana. This is a reduction of 37 cases and 34 ranches from the reported incidence of the previous year. The disease was reported in no new areas.

BRUCELLOSIS -- A total of 123,878 cattle was tested for brucellosis revealing 438 reactors (0.353%) and 4,899 suspects (3.95%). Of the total tested, 45,997 were tested out of state; 43,697 were traced from backtags, and 2,300 from

brands and other identification. The total number of cattle tested is 29,394 more than tested in the fiscal year 1964. The percent of reactors was 0.409 in fiscal year 1964 compared with 0.353% in fiscal year 1965.

There were 13,411 ABR tests made on milk and cream samples, an increase of 606 over fiscal year 1964. Fifty-four, or 0.321%, were suspicious to the test compared with 0.320% in fiscal year 1964.

The progress made in the reduction of herds infected with brucellosis, of counties with infected herds, and the number of calves vaccinated during the fiscal year are shown in the following three tables.

Table I. The Reduction of Brucellosis-Infected Herds in Montana

First area test in Montana	2,434 infected herds	7.96%
July 1, 1957	666 " "	2.36%
July 1, 1958	357 " "	1.24%
July 1, 1959	238 " "	0.92%
July 1, 1960	135 " "	0.56%
July 1, 1961	93 " "	0.34%
July 1, 1962	49 " "	0.16%
July 1, 1963	44 " "	0.15%
July 1, 1964	36 " "	0.14%
July 1, 1965	37 " "	0.14%

Table II. The Progress of Bovine Brucellosis Eradication in Montana Counties

County	Herds Infected Initial Area Test		Herds Infected June 30, 1965	
	No.	Percent	No.	Percent
Beaverhead	75	18.7	None	None
Blaine	30	4.6	"	"
Broadwater	54	23.6	"	"
Carbon	149	13.9	"	"
Cascade	140	13.9	"	"
Chouteau	35	5.2	"	"
Daniels	18	5.9	"	"
Dawson	34	4.6	"	"
Deer Lodge	26	24.7	"	"
Fergus	106	10.7	"	"
Flathead	30	2.6	"	"
Garfield	27	7.5	"	"
Golden Valley	24	12.1	"	"
Granite	28	16.3	"	"
Jefferson	32	13.6	"	"
Judith Basin	59	12.6	"	"
Liberty	7	4.2	"	"
Lincoln	15	5.3	"	"
McCone	17	3.6	"	"
Meagher	54	34.3	"	"
Mineral	3	4.3	"	"
Missoula	60	10.3	"	"
Musselshell	27	9.0	"	"
Petroleum	27	19.1	"	"
Powell	51	17.4	"	"

County	Herds Infected Initial Area Test No.	Herds Infected Initial Area Test Percent	Herds Infected June 30, 1965 No.	Herds Infected June 30, 1965 Percent
Roosevelt	50	8.4	None	None
Sheridan	23	3.7	"	"
Silver Bow	8	8.7	"	"
Stillwater	52	7.1	"	"
Sweet Grass	56	12.1	"	"
Teton	35	5.2	"	"
Toole	13	4.6	"	"
Treasure	26	15.8	"	"
Valley	33	4.4	"	"
Wheatland	17	12.3	"	"
Wibaux	23	8.4	"	"
Yellowstone	91	7.7	"	"
Carter	34	7.9	1	0.23
Lewis & Clark	67	17.1	1	0.25
Madison	87	14.2	1	0.15
Park	50	10.6	1	0.20
Phillips	30	4.8	1	0.13
Pondera	36	6.4	1	0.85
Rosebud	39	3.9	1	0.10
Custer	5	1.7	2	0.64
Fallon	18	5.3	2	0.58
Prairie	20	11.9	2	0.6
Big Horn	91	13.2	3	0.42
Gallatin	62	6.4	3	0.3
Lake	105	7.8	3	0.28
Glacier	88	17.7	4	0.75

Table III. Calves Officially Vaccinated with Brucella abortus Vaccine Strain 19

1954 - 205,207	1960 - 215,043
1955 - 315,257	1961 - 224,576
1956 - 317,676	1962 - 209,472
1957 - 296,463	1963 - 250,899
1958 - 303,090	1964 - 297,002
1959 - 294,265	1965 - 267,367

In addition to Table III, reports were received that 8,783 doses of Brucella abortus vaccine were sold indicating that many calves were unofficially vaccinated.

Twelve counties were recertified as modified certified brucellosis areas during the fiscal year.

The following facts are significant in measuring the progress made during the year toward total brucellosis eradication. The percentage of brucellosis reactors to the blood test was reduced only 0.056% from the level of the previous year. The number of brucellosis-infected herds in the state is one more July 1, 1965, than on July 1, 1964. Seven counties were successful in eliminating all brucellosis-infected herds during the fiscal year, but six counties acquired brucellosis-infected herds during the same period, thus there was only a gain of one county with no known brucellosis-infected herds. There are 37 counties with no known infected herds and 19 counties containing 37 brucellosis quarantined herds at the end of the fiscal year. Many of the 37 infected

brucellosis herds are the same herds that have remained infected for several years. The reason for the herds remaining infected would appear to be the unwillingness of the individual owner to adopt proven procedures to eliminate the disease. Every infected herd is a potential danger to the thousands of herds now free of brucellosis.

CALF SCOURS -- From field reports and laboratory reports it is indicated that there was considerable less calf scours the spring of 1965 than the heavy losses sustained in 1964. We believe the primary reason is that the beef herds had better weather conditions during calving in 1965 than in 1964.

The Livestock Sanitary Board at their regular meeting held in May 1965 allocated $10,000 of livestock mill levy funds to the Montana Veterinary Research Laboratory at Bozeman to support their share of the regional research project on calf scours. Several northwestern states have embarked on this coordinated research project. If ways can be determined to lessen this calf loss under modern-day management practices, the money spent will be returned many times to the cattle producer.

COCCIDIOSIS was reported in 8,844 cases on 568 ranches during the late fall and winter of 1964-65. This is over two times the number of cases and four times the ranches reported the previous year. This again confirms the long observed fact that adverse weather conditions predispose calves to this protozoan disease, and again supports Dr. Hadleigh Marsh's exacerbation theory. We wish more could be done in determining better ways of preventing these outbreaks.

FLUOROSIS -- Under poisoning, Montana veterinarians reported evidence of clinical fluorosis in 273 cattle on 24 premises. Some of the cases were advanced to the point that the value of the animal was destroyed.

All cases were reported in one county and all were grazing within a fifteen-mile radius of a phosphate plant.

The State Veterinarian's office prepared a brochure reviewing the literature of 14 recent scientific publications on fluorosis in animals which was distributed to all deputy state veterinarians on December 21, 1964. The general conclusions of research are that cattle must, to safeguard their health, not be permitted to consume feed which contains over or is contaminated by 40 p.p.m. of fluorine.

The fifteen-mile area in the one county has had a healthy livestock economy since territorial days. Approximately 22,000 head of livestock are produced in the area annually. It seems imperative that adequate legislation be provided to assure the operation of one industry will not ruin the economical production of another very important industry.

LEPTOSPIROSIS was reported in 508 cases and on 103 ranches -- an increase of 274 cases and 11 premises over last year. Leptospira bacterins will prevent outbreaks.

A study by the diagnostic laboratory with the assistance of the Rocky Mountain Laboratory at Hamilton will be established during the coming year to determine the serotypes of Leptospira affecting Montana cattle. This is important to know in establishing preventative programs.

Three thousand and fifty-five blood samples were tested with Leptospira pomona antigen, using the rapid-plate Stoenner procedure. Eighty-eight, or 2.5%, were positive in dilutions of 1:160 or greater.

PULMONARY EMPHYSEMA -- During the fiscal year 494 cases on 167 premises were reported. This is a decrease of 267 cases and 68 premises from the previous year. The reasons for the decrease cannot be explained with our present knowledge of the disease.

RHINOTRACHEITIS -- The increase in infectious bovine rhinotracheitis the past ten years has been as follows:

Year	Cases	Herds	Year	Cases	Herds
1956	117	11	1961	438	46
1957	210	28	1962	120	29
1958	142	22	1963	717	58
1959	103	29	1964	701	37
1960	139	21	1965	2253	66

The three-fold increase the past year is significant and portends that this disease may be an important cattle disease with which we may be faced in the future. The features of the disease -- that the IBR virus can cause pustular vaginitis, can cause abortions and cause infectious bovine rhinotracheitis -- make it a serious viral threat.

There is no specific treatment for the affected animal, but fortunately there is a vaccine that will prevent the disease. We are certain the timely use of the vaccine will prevent many cases.

SCABIES -- In January 1965 it was reported by Colorado officials that Chorioptic mange mites were demonstrated in lesions found on a Shorthorn bull that originated from Lake County, Montana. The bull was one of a show string that had been attending purebred shows in the Midwest and on the West Coast.

The herd of origin containing 269 cattle was placed under quarantine. Careful inspection of the cattle failed to demonstrate any mange mites. Even though there was a possibility that the infested bull contracted the infection on the show circuit, the herd was dipped twice in order to remove the remotest possibility of this mange mite becoming established in Montana.

SHIPPING FEVER -- This disease continues to be the major disease of young cattle. Montana veterinarians reported 6,242 cases on 436 premises. This is a reduction of 1,861 cases and 178 premises from the previous year.

UROLITHIASIS -- This ancient metabolic disease still is being reported in too large numbers. It was reported in 1,164 steer calves on 842 premises -- about the same as previous years.

TUBERCULOSIS -- The tuberculin test was applied to 3,801 dairy cattle and 6,229 beef cattle, a total of 11,587. Five cattle in three herds gave a positive reaction to the test, 0.043%. Two of the herds have completed two successive negative 60-day interval retests and are released from quarantine. The third herd will be retested the next fiscal year.

A total of 45,997 cattle was slaughtered under backtag or brand identification. Fifty-four cattle, 0.117%, were found to have lesions grossly resembling

tuberculosis lesions. Thirty-one of the 54 gross lesions were found to contain acid-fast organisms or histologically resemble a tuberculosis lesion. Of the 31 samples, no isolations could be made bacteriologically in 16, Mycobacterium avium was demonstrated in 6, M. avium and M. bovis were both demonstrated in 1 lesion, and 8 samples were either not run bacteriologically or have not been completed. In 23 of the gross lesions, histologically and bacteriologically the lesions could not be confirmed as tuberculosis or were demonstrated to be caused by some other disease organism.

At the end of the fiscal year 4 of the herds in which M. avium had been recovered and the herd from which both M. avium and M. bovis had been recovered have been tuberculin tested. The 5 herds contained 523 cattle which were all negative to the tuberculin test. In addition, 11 herds containing 835 cattle, in which acid-fast organisms were demonstrated but no isolations made, were tested with tuberculin -- all with negative results. The herd containing the cow which had the mesenteric lesion containing M. bovis will be retested again in the fall of 1965. Our conclusions, based on followup tests made on herds in which only small mesenteric lesions have been demonstrated which yield M. avium over about a twenty-five year period, are the herd of origin will be negative to mammalian tuberculin test.

Ten counties were reaccredited as modified accredited tuberculosis areas during the year.

VIBRIOSIS -- Veterinarians reported 93 cases of vibriosis on 18 premises. The laboratory isolated Vibrio fetus from 72 cattle specimens.

The field trials conducted by the Ray Foundation of Montana on a Vibrio fetus trivalent bacterin developed by the Montana Veterinary Research Laboratory were completed during the fiscal year. The results indicated that the bacterin gave excellent results in preventing infertility in first-calf heifers in vibriosis-infected herds.

Since it was impossible to have the bacterin available through commercial production for the spring of 1965, the Ray Foundation of Montana and the Montana Veterinary Research Laboratory produced and distributed 88,000 doses of the bacterin in Montana. We are confident their efforts did much to assure many ranchers a better calf crop. We hope the Montana trivalent bacterin will be readily available in coming years.

Sheep Diseases

Eighteen sheep diseases were reported during the year by Montana veterinarians on 101 ranches in 7,792 sheep.

BLUETONGUE -- The second successive year has passed without cases of bluetongue being reported in Montana following the extensive outbreak in southeastern Montana in 1962.

CONTAGIOUS ECTHYMA -- According to veterinarians' reports, this disease is the most frequent infectious disease reported in Montana sheep -- 3,184 cases were reported on 14 premises.

FOOT-ROT -- Infectious foot-rot was reported in 1,182 sheep during the fiscal

year. Most of the cases were observed on one ranch in southwestern Montana. This department extended every effort to assist in eliminating the disease from the bands of sheep involved. This is a disease that can be eliminated following a conscientious effort to do so. Indifference or carelessness in the effort to "cleanup" a band can undo a lot of work. There can be no doubt that the disease can and does make sheep production unprofitable. Therefore, it is unthinkable to permit the disease to exist in any Montana flock of sheep to endanger the health of any band that may come in to contact directly or indirectly.

SCABIES -- During the year 925,173 sheep were inspected. No scabies was observed. This is the 44th consecutive year Montana has remained free of the disease.

Swine Diseases

A total of 11 swine diseases was reported involving 754 swine on 67 premises. This is a reduction of 971 swine and 10 premises compared with the previous year.

BRUCELLOSIS -- No clinical evidence of brucellosis was reported, nor did the laboratory demonstrate *Brucella* in any swine during the year. Serological samples were made on 655 swine blood samples and 2 were reported positive to the test. Follow-up testing on the herds of origin revealed no further evidence of brucellosis.

The following herds became or were recertified (validated) brucellosis-free herds during the year in accordance with the provisions of Regulation 314:

			Effective Date
1.	Calvin Arneson	Bozeman	12-29-64
2.	John D. Chapman	Bozeman	2-11-65
3.	Ervine Clark	Luther	7-15-64
4.	Walter Herman	Bozeman	11-3-64
5.	M. E. Muller & Sons	Corvallis	3-9-65
6.	Perry Farms	Fort Benton	9-15-64
7.	Loran Perry	Fort Benton	3-31-65
8.	Robert Rogers	Hamilton	3-2-65
9.	Sherman Smith	Bozeman	2-18-65

HOG CHOLERA -- An outbreak of hog cholera was reported on one premises in Montana August 7, 1964, following the use of modified live-virus vaccine, without serum, on feeder pigs under stress conditions. The premises and swine were quarantined and completely depopulated of swine. There was no spread of the disease from the premises. Montana has had four outbreaks of hog cholera since 1958 and all were the result of using a modified live-virus vaccine.

The necessity to prevent future outbreaks of hog cholera due to modified live-virus vaccine was apparent. This was done by revising Regulations 1007 through 1009 and Regulation 1522 prohibiting the use of modified live-virus vaccine. The prohibition of the use of the modified live-virus vaccine also was necessary to qualify Montana as a Hog Cholera-Free State under the National Hog Cholera Eradication Program.

Montana is in Phase IV of the National Hog Cholera Eradication Program and is looking forward to qualifying as a Hog Cholera-Free State the first part of 1966.

Horse Diseases

A total of 7 diseases was reported in 976 horses on 459 premises. This is a reduction of 4 diseases, 665 horses and 335 premises -- a marked reduction in reported horse diseases from the preceding year.

DISTEMPER accounted for 749 of the diseases reported on 376 of the premises.

ENCEPHALOMYELITIS -- There was a marked decrease in reported cases of equine encephalomyelitis from the previous year. Nine cases were reported on 9 premises. This is a reduction of 98 cases and 92 premises from those reported the previous year.

Dog and Wild Animal Diseases

RABIES -- Last year it was reported that in the spring of 1964 Montana had an outbreak of skunk rabies in Carter County, Montana. Two skunks from that county were found positive to rabies on laboratory examination. The outbreak continued in to the last half of 1964 in the current fiscal year. The laboratory demonstrated rabies virus in 5 more skunks and 1 calf that died in Carter and Fallon Counties the current fiscal year. In addition, 3 bats submitted to the laboratory also were positive for rabies.

A total of 114 specimens from 20 species of animals was submitted for rabies examination and were negative during the year.

The lack of appearance of rabies in Carter and Fallon Counties the last half of the fiscal year (January 1 to June 30, 1965) leads us to hope that the skunk-reduction program carried out in 1964 and the extremely severe winter of 1964-65 may have helped in eliminating this dread disease from Montana.

Poultry Diseases

Ten poultry diseases were reported on 17 premises involving 1,735 birds.

SALMONELLA -- All breeding flocks supplying hatchery eggs were tested in their entirety for pullorum disease. A total of 34,680 birds was tested and 9 reactors were found, 0.025%.

Salmonella pullorum was isolated from 6 chickens, S. gallinarum from 1 chicken, S. arizona from 3 chickens, and S. typhimurium from 2 chickens submitted to the laboratory.

The following review of the S. pullorum testing of breeding flocks shows that the lowest incidence of pullorum has been attained in the history of the program:

Date	No. Tested	No. Positive	Percent
1955	46,425	14	0.306
1956	81,745	124	0.150
1957	83,434	67	0.080
1958	82,171	38	0.046
1959	84,165	32	0.038
1960	97,549	157	0.161
1961	75,852	33	0.043
1962	62,339	59	0.091
1963	56,988	16	0.028
1964	40,824	42	0.010
1965	34,680	9	0.025

MONTANA VETERINARIANS' DISEASE REPORT

CATTLE	CASES	HERDS
Actinomycosis-bacillosis	1,581	1,250
Anaplasmosis	269	130
Avitaminosis A	585	33
Bacillary hemoglobinuria	98	79
Blackleg	110	68
Brisket edema	3	3
Cancer eye	2,065	1,519
Clostridium novyi infection	2	2
Clostridium sordellii "	6	1
Coccidiosis	8,844	568
Diphtheria	148	82
Enteritis, non-specific	435	41
Enteritis, *S. typhimurium*	1	1
Enterotoxemia	20	6
EBV abortions	5	4
Frost bite	5	1
Grass tetany	34	21
Infectious keratitis	790	59
Leptospirosis	508	103
Listeriosis	1	1
Malignant edema	21	11
Mandibular phlegmon	10	10
Mange, demodex	2	1
Mucosal disease	87	29
Photosensitization	4	4
Pneumonia	111	43
Poisoning, fluorine	273	24
Poisoning, lead	10	6
Poisoning, nitrate	7	1
Pulmonary emphysema	494	167
Rabies	1	1
Rhinotracheitis	2,253	66
Shipping fever	6,242	436
Urolithiasis	1,164	842
Vibriosis	93	18
Virus diarrhea	31	9
Vulvovaginitis, pustular	47	1
Warts	58	13
White muscle	158	106
Winter exhaustion	122	18
TOTAL	26,698	5,778

SHEEP	CASES	HERDS
Abortions	60	1
Coccidiosis	50	1
Contagious ecthyma	3,184	14
Enterotoxemia	260	29
Epididymitis	12	5
Foot-rot	1,182	18
Inf. keratitis	20	1
Helminthiasis	180	3
Lip & leg ulceration	358	4
Listeriosis	8	5
Malnutrition	50	1
Melophagus ovinus	350	1
Pediculosis	1,642	5
Poisoning, copper	6	1
Posthitis	8	1
Urolithiasis	6	2
Vibriosis	386	8
Virus abortions	30	1
TOTAL	7,792	101

SWINE		
Abscesses	35	1
Anemia	1	1
Atrophic rhinitis	197	18
Enterotoxemia, Type D	1	1
Erysipelas	270	36
Hog cholera	40	1
Influenza	45	2
Leptospirosis	4	1
Poisoning, mercury	2	1
Scabies, Sarcoptic	9	1
Streptococci, hemolytic	35	1
TOTAL	639	64

Montana Veterinarians' Disease Report (Continued)

HORSES	CASES	HERDS
Distemper	749	376
Encephalomyelitis	9	9
Infectious anemia	10	9
Influenza	195	53
Malignant edema	2	2
Pneumonia	7	7
Tetanus	4	3
TOTAL	976	459

DOGS	
Coccidiosis	1
Distemper	1,024
Infectious hepatitis	167
Leptospirosis	126
Mange, demodex	1
TOTAL	1,319

POULTRY		
Avitaminosis A	310	3
Botulism	82	2
Fowl typhoid	40	1
Infectious bronchitis	16	1
Infectious sinusitis	25	1
Leukosis	41	2
Pullorum	200	1
Salmonella arizona	1	1
Taeniasis	1,000	1
Tuberculosis	20	4
TOTAL	1,735	17

LIVESTOCK MARKETS

A deputy state veterinarian is assigned to each of the sixteen livestock markets. His responsibilities are to inspect all livestock entering the market for infectious and contagious diseases, and to enforce all regulations pertaining to handling diseased livestock and all regulations pertaining to maintenance of sanitary standards.

The cooperation of the markets has been very good in screening out diseased livestock to prevent them from returning to ranches where they could do irreparable harm, and in taking all other preventive measures to prevent transmission of disease.

The number of livestock inspected at the markets the past five years is:

	1960-61	1961-62	1962-63	1963-64	1964-65
Cattle	683,621	694,333	656,336	732,362	792,969
Sheep	302,443	258,678	230,169	245,150	199,868
Swine	79,953	93,019	112,138	136,803	121,820
Horses	8,883	8,229	10,534	9,771	9,587
TOTALS	1,074,900	1,054,259	1,009,186	1,124,086	1,124,244

LIVESTOCK IMPORTS

During the year 220,754 head of livestock from 38 states and 2 foreign countries were shipped into Montana.

The number of livestock shipped into Montana the past nine years is as follows:

Year	Cattle	Horses	Sheep	Swine	Dogs	TOTAL
1956-57	34,288	1,030	73,701	23,687	606	133,312
1957-58	68,481	1,397	83,077	26,288	576	179,819
1958-59	78,424	1,888	117,905	20,524	573	219,314
1959-60	62,477	2,078	73,926	13,831	584	153,896
1960-61	49,357	2,230	36,171	25,694	701	114,153
1961-62	91,956	1,957	70,953	31,278	565	196,709
1962-63	107,942	2,529	78,741	27,194	577	216,983
1963-64	101,120	2,143	56,570	52,825	538	213,196
1964-65	101,050	2,206	56,170	61,328	708	220,754

One of the duties assigned the Livestock Sanitary Board is to prevent the introduction of livestock and poultry diseases into the state. This requires considerable time and effort. We believe the regulations of the Board promulgated to carry out these functions do provide every known reasonable protection. The cooperation of the livestock producer, poultry producer, and some livestock and poultry dealers has been excellent in assisting in preventing a disease introduction. Unfortunately, there are a few livestock and poultry dealers and traders that have little or no regard for the health of Montana herds and flocks and do everything they can to circumvent health regulations and common sense control of disease.

LIVESTOCK IMPORTS
7/1/64 -- 6/30/65

ORIGIN	NUMBER OF HEALTH CERTIFICATES	NUMBER OF ANIMALS				
		Horses	Cattle	Sheep	Swine	Dogs
Alabama	1			1		
Alaska	19					19
Arizona	26	25	1,191			14
Arkansas	8					10
California	138	46	850	27		104
Colorado	204	161	3,483	51		9
Connecticut	1					1
Florida	4		165			4
Georgia	1		100			
Idaho	424	108	12,887	13,118	1	43
Illinois	26		112		2	8
Indiana	9	4	1			8
Iowa	127	8	263	579	13,380	28
Kansas	53	24	435			25
Kentucky	2	6				
Louisiana	2		278			
Michigan	4	3				3
Minnesota	362	24	1,211		45,092	70
Mississippi	3					3
Missouri	31	11	136		2	17
Nebraska	129	111	2,620		1,613	36
Nevada	22	11	2,287			3
New Jersey	7		7			
New Mexico	35	71	4,609			1
New York	2	2	1			
North Dakota	791	261	13,194	4,710	828	7
Ohio	5		68			4
Oklahoma	21	12	2,064	1	3	11
Oregon	96	22	1,541	6,622		52
Pennsylvania	2		1			1
South Dakota	484	119	7,443	7,797	356	9
Tennessee	2					2
Texas	87	27	14,094	1,842		20
Utah	131	64	1,917	233		21
Virginia	2			1		1
Washington	318	87	3,234	4,943	36	135
Wisconsin	47	7	577			11
Wyoming	502	310	20,041	11,529	14	23
Canada	332	682	6,083	4,716	1	5
Mexico	3		157			
TOTALS	4,463	2,206	101,050	56,170	61,328	708

OFFICIAL ANIMAL INSPECTIONS
7/1/64 - 6/30/65

HORSES:		
Inspected for interstate shipment	2,508	
Inspected at markets	9,587	
Miscellaneous inspections	182	
		12,277
CATTLE:		
Dairy cattle tested for tuberculosis	3,801	
Beef cattle tested for tuberculosis	6,229	
Accredited tuberculosis-free herds tested	3	
Cattle in accredited tuberculosis-free herds tested	366	
Tuberculin tested at destination (importations)	374	
Tuberculin tested for interstate shipment	1,168	
Inspected for interstate shipment	635,849	
Inspected at markets	792,969	
Miscellaneous inspections	23,474	
		1,464,233
SHEEP:		
Infectious foot-rot inspections	83,522	
Inspected for interstate shipment	608,681	
Inspected at markets	199,868	
Miscellaneous inspections	33,102	
		925,173
SWINE:		
Inspected for interstate shipment	431	
Inspected at markets	121,820	
Miscellaneous inspections	2,039	
		124,290
POULTRY:		
Miscellaneous inspections	67,757	
		67,757
DOGS:		
Inspected for interstate shipment	1,338	
Miscellaneous inspections	85	
		1,423
GRAND TOTAL		2,595,153

DIAGNOSTIC LABORATORY DIVISION

The results of the work at the diagnostic laboratory are reported in Tables I through XI immediately following.

Table I. Distribution of Laboratory Tests Among Species of Animals

Cattle	99,330	64.5%
Chicken	35,030	22.1%
Milk	15,434	10.0%
Swine	1,238	0.8%
Elk	782	0.5%
Buffalo	395	0.2%
Sheep	393	0.2%
Dog	322	0.2%
Cat	84)	
Deer	67)	
Bat	42)	
Skunk	41)	
Goat	39)	
Pheasant	36)	
Rabbit	36)	
Duck	34)	
Chinchilla	31)	
Mouse	12)	
Guinea Fowl	9)	
Hamster	8)	
Moose	8)	
Turkey	8)	
Pigeon	7)	
Gopher	6)	
Guinea Pig	6)	
Goose	5)	
Big Horn Sheep	4)	
Muskrat	4)	
Squirrel	4)	
Fox	3)	
Gerbil	3)	1.5%
Monkey	3)	
Raccoon	3)	
Beaver	2)	
Canary	2)	
Chipmunk	2)	
Coyote	2)	
Fish	2)	
Grouse	2)	
Mink	2)	
Rat	2)	
Badger	1)	
Bear	1)	
Bobcat	1)	
Llama	1)	

Total -- 45 different species

Table II. Bacteriological, Pathological and Parasitological Report

FINDINGS	SOURCE	NUMBER
Abdominal hemorrhage	Moose	1
Abomasal rupture	Sheep	1
Abomasal ulceration	Cattle	1
Abomasitis	Sheep	1
Abscesses	Cattle	1
Abscesses (strongyle larvae)	Horse	1
Achondroplastic brachycephalic	Cattle	1
Actinobacillus lignieresii	Buffalo	1
Actinobacillus lignieresii	Cattle	2
Actinobacillus lignieresii	Horse	1
Actinobacillus lignieresii	Mink	1
Actinobacillus lignieresli	Rabbit	1
Actinobacillus lignieresii	Sheep	1
Actinomyces bovis	Cattle	1
Adenitis	Sheep	1
Adenocarcinoma	Dog	1
Adeno-virus	Cattle	1
Aerobacter aerogenes	Cattle	2
Aerobacter aerogenes	Sheep	1
Aerobacter aerogenes	Swine	1
Alcaligenes dispar	Swine	1
Anaplasma marginale	Cattle	19
Anemia	Cattle	1
Anemia	Poultry	1
Anemia	Sheep	1
Anemia	Swine	2
Ammonia burn	Poultry	1
Ascariasis	Poultry	1
Ascariasis	Swine	1
Ascaris equorum	Horse	3
Ascaris quabale	Poultry	1
Ascaris suis	Swine	1
Aspergillus fumigatus	Pigeon	1
Aspergillus fumigatus	Turkey	1
Atresia ani	Cattle	1
Atrophic rhinitis	Swine	1
Avitaminosis A	Poultry	1
Avitaminosis A & D	Poultry	1
Black disease	Sheep	1
Bloat	Cattle	3
Bloat	Dog	1
Bloat	Goat	1
Blood	Cattle	1
Bordetella bronchisepticus	Swine	1
Bordetella bovis	Cattle	2
Brachycephalic dwarf	Cattle	1
Brisket edema	Cattle	4
Brucella abortus	Cattle	1
Brucella abortus, Type 1	Cattle	1
Brucella ovis	Sheep	1
Buxtonella sulcata	Cattle	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Candida albicans	Cattle	3
Candida albicans	Feed	1
Cannibalism	Poultry	3
Carcinoma	Cattle	3
Carcinoma	Dog	2
Cardiac anomaly	Cattle	2
Cardiac tamponade	Cattle	1
Castration infection	Swine	1
Cerebellar nypoplasia	Cattle	3
Cervicitis	Horse	1
Cirrhosis	Cattle	2
Clostridium botulinum (Type C)	Cattle	1
Cl. carnis	Horse	1
Cl. chauvei	Cattle	3
Cl. hemolyticum	Cattle	3
Cl. novyi	Buffalo	1
Cl. novyi	Cattle	5
Cl. perfringens	Cattle	1
Cl. perfringens (Type A)	Cattle	6
Cl. perfringens (Type A)	Sheep	1
Cl. perfringens (Type C)	Cattle	3
Cl. perfringens (Type C)	Sheep	3
Cl. perfringens (Type C and D)	Cattle	3
Cl. perfringens (Type C and D)	Sheep	1
Cl. perfringens (Type D)	Cattle	3
Cl. perfringens (Type D)	Sheep	5
Cl. septicum	Cattle	10
Cl. septicum	Deer	1
Cl. sordellii	Cattle	1
Coccidiosis	Cattle	9
Coccidiosis	Poultry	9
Coccidiosis	Rabbit	2
Coccidiosis	Sheep	4
Colibacillosis	Cat	1
Colibacillosis	Cattle	92
Colibacillosis	Dog	1
Colibacillosis	Elk	1
Colibacillosis	Gerbil	1
Colibacillosis	Goat	1
Colibacillosis	Guinea Fowl	1
Colibacillosis	Horse	6
Colibacillosis	Pigeon	1
Colibacillosis	Poultry	3
Colibacillosis	Sheep	4
Colibacillosis	Swine	31
Congenital ataxia	Cattle	1
Conjunctivitis	Cattle	1
Conjunctivitis	Poultry	1
Corynebacterium	Swine	2

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Corynebacterium bovis	Cattle	3
Corynebacterium ovis	Sheep	2
Corynebacterium pyogenes	Cattle	7
Corynebacterium pyogenes	Sheep	1
Corynebacterium pyogenes	Swine	1
Crop bound	Poultry	1
Cysticercus coenurus	Rabbit	1
Damalinia equi	Horse	1
Damalinia ovis	Sheep	1
Demodex folliculorum	Dog	2
Dermacentor venustus	Tick	1
Dictyocaulus filaria	Sheep	2
Dictyocaulus viviparus	Cattle	3
Diphtheria	Cattle	1
Dystocia	Cattle	4
Edema disease	Swine	1
Emaciation	Cattle	2
Emaciation	Poultry	1
Enteritis	Cattle	1
Enterobacteria (Providence Group)	Cattle	1
Enterohepatitis	Poultry	4
Enterohepatitis	Turkey	2
Enzootic virus abortion	Cattle	1
Eosinophilia	Cattle	3
Equine virus abortion	Horse	1
Erysipelothrix rhusiopathiae	Swine	1
Escherichia coli	Water	2
E. coli and A. aerogenes	Cattle	3
E. coli and A. aerogenes	Horse	1
E. coli meningitis	Cattle	2
E. coli septicemia	Cattle	164
E. coli septicemia	Dog	1
E. coli septicemia	Horse	2
E. coli septicemia	Poultry	2
E. coli septicemia	Sheep	2
E. coli septicemia	Swine	11
Esophageal injury	Cattle	1
Eye injury	Poultry	1
Fasciola hepatica	Sheep	1
Fatty degeneration	Cattle	1
Fatty degenerative infiltration	Cattle	1
Fatty degeneration of liver	Chinchilla	1
Fibroma	Deer	1
Fibroma	Dog	2
Fibroma	Horse	4
Fibrosarcoma	Cattle	1
Fibrosarcoma	Dog	1
Fit for food	Cattle	4

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Fit for food	Elk	1
Fit for food	Sheep	1
Fit for food	Swine	1
Fracture	Swine	1
Fusarium	Beet Tops	1
Gastrophilus intestinalis	Horse	1
Glomerulonephritis	Cattle	3
Granuloma	Dog	2
Haematopinus eurysternus	Cattle	1
Haemonchus contortus	Cattle	1
Haemophilus sp.	Cattle	1
Heart failure	Horse	1
Helminthiasis	Cattle	10
Helminthiasis	Monkey	1
Helminthiasis	Poultry	3
Helminthiasis	Sheep	5
Helminthiasis	Swine	1
Hematobia irritans	Cattle	1
Hematology	Cattle	5
Hematology	Dog	2
Hematology	Horse	3
Hemophilus bovis	Cattle	1
Hemorrhage of lungs	Poultry	1
Hepatitis	Cattle	1
Herella sp.	Cattle	1
Hog cholera	Swine	2
Hyaline degeneration	Cattle	1
Hydrocephalus	Cattle	1
Hypoderma lineatum	Meat	1
Infectious anemia	Horse	1
Infectious bovine rhinotracheitis	Cattle	3
Infectious bronchitis	Poultry	4
Infectious hepatitis	Dog	1
Infectious pharyngitis	Horse	1
Infectious sinusitis	Poultry	1
Iodine deficiency	Cattle	2
Iodine deficiency	Sheep	1
Keratoconjunctivitis	Cattle	2
Lactobacillus	Swine	1
Leptospira (pos. ident.)	Cattle	25
Leptospira (susp.)	Cattle	10
Leptospira (pos. ident.)	Dog	3
Leptospira (susp.)	Sheep	1
Leptospira (pos. ident.)	Swine	1
Leptospira (susp.)	Swine	3
Leptospiral meningitis	Cattle	1
Leucosis	Poultry	23
Leucopenia	Swine	3
Linognathus setosus	Dog	1
Lipoma	Dog	1
Lipoma	Sheep	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Liver abscesses	Cattle	2
Liver abscesses	Llama	1
Lung abscesses	Sheep	1
Lymphomatosis	Cattle	2
Lymphomatosis	Dog	1
Lymphomatosis	Horse	1
Malnutrition	Cattle	2
Malnutrition	Chinchilla	2
Malnutrition	Poultry	2
Malnutrition	Rabbit	1
Malnutrition	Swine	1
Melanoma	Dog	1
Meningitis	Cattle	1
Methemoglobinemia	Cattle	2
Metritis	Cattle	3
Metritis	Sheep	1
Metritis	Swine	2
Microbial sensitivities	Cat	7
Microbial sensitivities	Cattle	352
Microbial sensitivities	Chinchilla	6
Microbial sensitivities	Dog	8
Microbial sensitivities	Elk	1
Microbial sensitivities	Gerbel	1
Microbial sensitivities	Goat	1
Microbial sensitivities	Guinea Fowl	1
Microbial sensitivities	Horse	16
Microbial sensitivities	Milk	80
Microbial sensitivities	Mouse	3
Microbial sensitivities	Pigeon	1
Microbial sensitivities	Poultry	17
Microbial sensitivities	Rabbit	3
Microbial sensitivities	Sheep	21
Microbial sensitivities	Swine	98
Microbial sensitivities	Water	1
Microsporum canis	Cat	1
Micrococcus infection	Dog	1
Mixed infection	Cat	1
Mixed infection	Cattle	12
Mixed infection	Chinchilla	1
Mixed infection	Dog	3
Mixed infection	Horse	2
Mixed infection	Mouse	1
Mixed infection	Sheep	1
Mixed infection	Swine	8
Moniezia expansa	Sheep	3
Moraxella bovis	Cattle	1
Mucor	Cattle	1
Musca autumnalis	Cattle	3
Mycobacterium avium	Cattle	3
Mycobacterium avium	Poultry	5
Mycobacterium avium	Swine	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Mycobacterium paratuberculosis	Cattle	1
Mycosis	Cat	2
Mycosis	Cattle	3
Mycosis	Horse	1
Mycosis	Pigeon	1
Mycosis	Sheep	2
Mycoplasma sp.	Poultry	1
Mycoplasma sp.	Sheep	3
Myocarditis	Cattle	1
Neascus sp.	Fish	1
Navel ill	Cattle	1
Navel ill	Swine	1
Necrotic colitis	Cattle	1
Necrotic enteritis	Cattle	1
Necrotic enteritis	Swine	2
Necrotic laryngitis	Cattle	2
Necrotic ulceration	Cattle	1
Necrotic vaginitis	Cattle	1
Neisseria pharyngitis	Cattle	1
Nematodirus spathiger	Cattle	1
Nematodirus spathiger	B.H.Sheep	1
Nematodirus spathiger	Sheep	1
Nephritis	Cattle	2
Nephritis	Guinea Fowl	1
Nephritis	Poultry	2
Nephritis	Swine	1
Nephrosis	Cattle	1
Neutropenia	Sheep	1
Noguchi cuniculi	Rabbit	1
Nutritional roup	Poultry	2
Otitis externa	Rabbit	1
Ovine virus abortion	Sheep	12
Oxyuris equi	Horse	1
Panleucopenia	Cat	5
Pasteurella hemolytica	Cattle	17
Pasteurella hemolytica	Horse	1
Pasteurella hemolytica	Sheep	5
Pasteurella hemolytica	Swine	3
Pasteurella multocida	Muskrat	1
Pasteurella multocida	Rabbit	1
Pasteurella pseudotuberculosis	Cattle	1
Peritonitis	Cattle	4
Peritonitis	Poultry	4
Photosensitization	Sheep	1
Polycythemia	Swine	3
Pneumonia	Cattle	19
Pneumonia	Dog	2
Pneumonia	Guinea Pig	1
Pneumonia	Sheep	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Pneumonia, chronic progressive	Sheep	1
Pneumonia	Swine	5
Poisoning -- Copper	Sheep	4
Poisoning -- Ergot	Swine	1
Poisoning -- Loco	Horse	1
Poisoning -- Sulfas	Poultry	1
Proteus vulgaris	Cattle	2
Proteus vulgaris	Chinchilla	1
Protostrongylus sp.	B.H. Sheep	1
Pseudoleukemia	Cattle	1
Pseudomonas aeruginosa	Cattle	9
Pseudomonas aeruginosa	Horse	1
Pseudomonas aeruginosa	Sheep	1
Pseudomonas aeruginosa	Swine	3
Pullet disease	Poultry	5
Pulmonary emphysema	Cattle	2
Pyridoxine deficiency	Swine	2
Rabies	Bat	3
Rabies	Cattle	1
Rabies	Skunk	5
Right cardiac hypertrophy	Cattle	1
Ruptured abomasum	Cattle	1
Ruptured diaphragm	Cat	1
Ruptured diaphragm and liver	Cat	1
Ruptured large intestine	Chinchilla	1
Salmonella arizona	Poultry	3
Salmonella arizona	Swine	1
Salmonella derby	Meat Meal	1
Salmonella gallinarum	Poultry	1
Salmonella infantis	Meat Meal	1
Salmonella livingston	Cat	1
Salmonella newport	Cattle	4
Salmonella orion	Meat Meal	1
Salmonella pullorum	Poultry	6
Salmonella rubislaw	Cattle	1
Salmonella sp.	Cattle	2
Salmonella sp.	Horse	1
Salmonella typhimurium	Cattle	5
Salmonella typhimurium	Poultry	2
Salpingitis	Poultry	1
Sarcoid	Horse	1
Scirrhus cord	Cattle	1
Setaria equi	Horse	1
Setaria genus	Cattle	1
Spastic calf	Cattle	1
Sphaerophorus necrophorus	Cattle	3
Sphaerophorus necrophorus	Sheep	2
Spinal abscess	Sheep	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Spirochetosis	Poultry	1
Spondylitis (Beta hemolytic strep.)	Cattle	1
Staphylococcus	Cattle	1
Staphylococcus	Chinchilla	1
Staphylococcus	Poultry	1
Staphylococcus	Rabbit	2
Staphylococcus	Swine	4
Staphylococcus aureus	Sheep	1
Staphylococcus, cystitis	Rabbit	1
Staphylococcus, dermatitis	Chinchilla	1
Staphylococcus, hemolytic	Cattle	7
Staphylococcus, hemolytic	Dog	2
Staphylococcus, hemolytic	Gulnea Pig	1
Staphylococcus, hemolytic	Horse	1
Staphylococcus, hemolytic	Sheep	1
Staphylococcus, hemolytic	Swine	2
Staphylococcus, ophthalmia	Cattle	1
Staphylococcus, polyarthritis	Swine	1
Streptococcal abortion	Cattle	1
Streptococcal abortion	Horse	1
Streptococcus	Cattle	13
Streptococcus	Horse	2
Streptococcus	Swine	3
Streptococcus, hemolytic	Cattle	10
Streptococcus, hemolytic	Chinchilla	1
Streptococcus, hemolytic	Horse	1
Streptococcus, hemolytic	Sheep	1
Streptococcus, hemolytic	Swine	7
Streptococcus, encephalitis	Cattle	1
Streptococcus, meningitis	Cattle	1
Streptococcus, pneumonia	Cattle	1
Streptococcus, pneumonia	Sheep	1
Streptococcus, tracheitis	Cattle	1
Strongylus equinus	Horse	2
Strongylus sp.	Horse	4
Strongyloides sp.	Sheep	1
Teratoma	Cattle	1
Tetanus	Cattle	2
Tetanus	Sheep	2
Thiamin and riboflavin deficiencies	Poultry	1
Torsion of mesentary	Swine	1
Toxocara canis	Dog	1
Trauma	Cat	2
Trauma	Cattle	1
Trauma	Dog	1
Trauma	Horse	1
Trauma	Poultry	2
Trauma	Sheep	1
Trichostrongylus sp.	B.H.Sheep	1
Trichostrongylus sp.	Sheep	3
Tuberculosis	Poultry	4

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Ulcerative enteritis	Pheasant	3
Ulcerative enteritis	Grouse	1
Umbilical hemorrhage	Cattle	1
Unfit for human food	Meat	9
Unsatisfactory specimens	Bat	3
Unsatisfactory specimens	Cattle	77
Unsatisfactory specimens	Dog	33
Unsatisfactory specimens	Feed	5
Unsatisfactory specimens	Horse	5
Unsatisfactory specimens	Meat	2
Unsatisfactory specimens	Milk	5
Unsatisfactory specimens	Poultry	3
Unsatisfactory specimens	Rabbit	2
Unsatisfactory specimens	Sheep	6
Unsatisfactory specimens	Swine	3
Unsatisfactory specimens	Water	1
Urinalysis	Cattle	2
Urinalysis	Dog	1
Urinary calculi	Cattle	1
Urinary calculi	Dog	3
Vasculogenesis, abnormal	Cattle	1
Vaginitis, purulent	Cattle	1
Vaginitis, purulent	Horse	1
Viability test	Br.Vaccine	17
Vibrio bubulus	Cattle	13
Vibrio fecalis	Cattle	1
Vibrio fecalis	Sheep	1
Vibrio fetus	Cattle	72
Vibrio fetus	Sheep	9
Vibrio sp.	Cattle	15
Virus diarrhea	Cattle	6
Virus diarrhea (New York Strain)	Cattle	3
Virus pig pneumonia	Swine	1
Visceral gout	Poultry	2
White muscle disease	Cattle	6
TOTAL		2,062
Negative acid-fasts	Cattle	4
Negative acid-fasts	Elk	1
Negative acid-fasts	Poultry	1
Negative acid-fasts	Sheep	1
Negative Actinomyces	Cattle	2
Negative *Anaplasma marginale*	Cattle	58
Negative Aspergillus	Pigeon	1
Negative atrophic rhinitis	Swine	1
Negative *Bacillus anthracis*	Cattle	7
Negative bacterial abortion	Cattle	505
Negative bacterial abortion	Horse	3
Negative bacterial abortion	Sheep	1
Negative bacterial abortion	Swine	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Negative Brucella	Buffalo	5
Negative Brucella	Cattle	17
Negative Brucella	Elk	2
Negative Brucella	Goat	1
Negative Brucella	Milk	1
Negative cerebellar hypoplasia	Cattle	1
Negative Cl. botulinum	Cattle	1
Negative Cl. botulinum	Duck	8
Negative Cl. botulinum	Pheasant	2
Negative Cl. botulinum	Swine	1
Negative Cl. feseri	Cattle	8
Negative Cl. hemolyticum	Cattle	7
Negative Cl. perfringens	Cattle	88
Negative Cl. perfringens	Horse	1
Negative Cl. perfringens	Sheep	23
Negative Cl. perfringens	Swine	3
Negative Cl. septicum	Cattle	5
Negative Cl. septicum	Horse	1
Negative Cl. sp.	Cattle	5
Negative Cl. tetani	Sheep	1
Negative coccidia	Cattle	5
Negative coccidia	Poultry	1
Negative crude oil	Cattle	1
Negative Dictyocaulus	Cattle	6
Negative Dictyocaulus	Horse	1
Negative diphtheria	Cat	1
Negative Dirofilaria	Dog	1
Negative distemper	Dog	1
Negative EBA virus	Cattle	10
Negative encephalomyelitis	Horse	5
Negative Erysipelothrix	Swine	9
Negative hepatitis	Dog	3
Negative hog cholera	Swine	1
Negative hydrocephalus	Cattle	32
Negative infectious bovine rhinotracheitis	Cattle	15
Negative Leptospira	Cattle	29
Negative Leptospira	Dog	3
Negative Leptospira	Horse	2
Negative Leptospira	Sheep	1
Negative leucosis	Poultry	3
Negative Listeria	Cattle	3
Negative mange mites	Cattle	6
Negative mange mites	Deer	1
Negative mange mites	Dog	1
Negative mange mites	Elk	1
Negative mange mites	Sheep	1
Negative methemoglobin	Cattle	3
Negative Mycobacterium paratuberculosis	Cattle	7
Negative Mycobacterium paratuberculosis	Sheep	1
Negative Mycobacterium tuberculosis	Cattle	3

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Negative Mycoplasma	Poultry	2
Negative Mycoplasma	Sheep	6
Negative mucosal disease	Cattle	1
Negative OVA	Sheep	23
Negative parasites	Cattle	14
Negative parasites	Chinchilla	2
Negative parasites	Dog	1
Negative parasites	Sheep	1
Negative Pasteurella tularensis	Beaver	1
Negative Pasteurella tularensis	Muskrat	1
Negative Pasteurella tularensis	Rabbit	2
Negative pathogenic bacteria	Buffalo	2
Negative pathogenic bacteria	Cat	2
Negative pathogenic bacteria	Cattle	117
Negative pathogenic bacteria	Chinchilla	7
Negative pathogenic bacteria	Dog	7
Negative pathogenic bacteria	Egg	1
Negative pathogenic bacteria	Grouse	1
Negative pathogenic bacteria	Milk	1
Negative pathogenic bacteria	Poultry	10
Negative pathogenic bacteria	Rabbit	3
Negative pathogenic bacteria	Sheep	6
Negative pathogenic bacteria	Swine	11
Negative pathogenic bacteria	Water	1
Negative pathogenic fungi	Cat	4
Negative pathogenic fungi	Cattle	8
Negative pathogenic fungi	Dog	3
Negative pathogenic fungi	Elk	1
Negative pathogenic fungi	Goose	1
Negative pathogenic fungi	Horse	1
Negative pathogenic fungi	Oat Hay	1
Negative pathogenic fungi	Prep. Feed	1
Negative Piroplasma	Horse	1
Negative psittacosis	Canary	2
Negative rabies	Bat	16
Negative rabies	Bobcat	1
Negative rabies	Cat	25
Negative rabies	Cattle	7
Negative rabies	Chipmunk	2
Negative rabies	Coyote	1
Negative rabies	Dog	49
Negative rabies	Fox	1
Negative rabies	Gopher	4
Negative rabies	Guinea Pig	1
Negative rabies	Hamster	4
Negative rabies	Mink	1
Negative rabies	Monkey	1
Negative rabies	Moose	7
Negative rabies	Muskrat	1
Negative rabies	Rabbit	2
Negative rabies	Raccoon	1
Negative rabies	Rat	1

Table II. (Continued)

FINDINGS	SOURCE	NUMBER
Negative rabies	Skunk	17
Negative rabies	Squirrel	2
Negative Salmonella	Cattle	5
Negative Salmonella	Chinchilla	1
Negative Salmonella	Dog	1
Negative Salmonella	Duck	8
Negative Salmonella	Guinea Fowl	1
Negative Salmonella	Horse	3
Negative Salmonella	Meat Meal	28
Negative Salmonella	Milk	9
Negative Salmonella	Monkey	1
Negative Salmonella	Pigeon	1
Negative Salmonella	Poultry	13
Negative Salmonella	Sheep	1
Negative Salmonella	Swine	7
Negative sarcosporidiosis	Cattle	1
Negative tick paralysis	Tick	1
Negative Toxoplasma	Cattle	6
Negative Toxoplasma	Dog	2
Negative Toxoplasma	Horse	2
Negative *Trichomonas fetus*	Cattle	29
Negative *Vibrio* sp.	Cattle	160
Negative *Vibrio* sp.	Sheep	17
Negative *Vibrio* sp.	Swine	2
Negative virus determination	Cattle	40
Negative virus determination	Horse	4
Negative water bloom	Water	1
Negative white muscle disease	Cattle	10
TOTAL		1,668

Table III. Serology

LABORATORY TESTS	SOURCE	POS.	NEG.	SUSP.	VAC.	UNSAT.	AC
Anaplasma CF test	Cattle	95	720	64		6	16
Anaplasma CF test	Horse		1				
Br. abortus agg. test	Buffalo	43	244	54			
Br. abortus agg. test	Cattle	329	73,215	3545	19	10	
Br. abortus agg. test (field)	Cattle		763				
Br. abortus agg. test	Deer		61				
Br. abortus agg. test	Dog		4	1			
Br. abortus agg. test	Elk	8	639	42			
Br. abortus agg. test	Goat		31	1			
Br. abortus agg. test	Horse		7	1			
Br. abortus agg. test	Sheep		4				
Br. abortus agg. test	Swine	2	637	15		1	
BRT cream			6,255	17		5	
BRT milk			7,092	37		5	
Johne's disease (CF)	Cattle	5	59	28			
L. canicola agg. test	Dog		8				
L. icterohemorrhagiae agg. test	Dog		8				
L. pomona agg. test	Buffalo		41				
L. pomona agg. test	Cattle	88	2,688	259			
L. pomona agg. test	Dog		8				
L. pomona agg. test	Elk		79				
L. pomona agg. test	Horse	2	5	1			
L. pomona agg. test	Sheep		5				
L. pomona agg. test	Swine		171				
Q fever CA test	Cattle		36				
S. pullorum agg. test (field)	Poultry	9	34,671				
Vibrio fetus agg. test	Cattle		1	2			
TOTALS -- 132,163		581	127,453	4067	19	27	16

Table IV. Milk and Cream Bacteriological Report

CREAM	IN COMPLIANCE	NOT IN COMPLIANCE
Antibiotic determination	331	53
Bacterial count	350	34
Coliform count	279	105
Totals	960	192
MILK		
Antibiotic determination	4212	23
Bacterial count	3894	297
Coliform count	2442	1767
*Mastitis	232	180
Totals	10,780	2267

*Beta hemolytic staphylococci & streptococci
Coli, Klebsiella, staph. & strep.
Hemolytic staphylococci
Hemolytic streptococci
Hemolytic staphylococci & Pseudomonas aeruginosa
Hemolytic staphylococci, streptococci & Corynebacterium

TOTAL -- 14,199

Table V. Chemical Toxicology Report

	Arsenic		Mercury		Lead			Strychnine	
	Pos.	Neg.	Pos.	Neg.	Pos.	Susp.	Neg.	Pos.	Neg.
Avian blood		6		6	1		5		
Avian liver		14		14	6	1	7		
Avian crop contents		1		1		1			
Bovine blood							3		
Bovine kidney		8		8	2		6		
Bovine liver	3	33		42	6	3	38		1
Bovine stomach contents	10	24		21	5	3	26	1	1
Canine blood									2
Canine liver		4		3			3		3
Canine feed		1		1			1		1
Canine stomach contents	1	14		12		1	18	10	15
Canine urine								1	
Deer meat		1							1
Elk meat									2
Equine liver		4		4	2	1	3		
Equine stomach contents	1	5		5			5		
Feline stomach contents									1
Fish									1
Grease					1			1	
Meat		3		3			3	1	7
Mixed feeds	1	11	2	12	12	1	7		
Metal		1		1	3				
Paint		4			4				
Paper wrapper								1	
Ovine stomach contents		2		2			2		
Porcine stomach contents		3		2			2		
Powders	4	1		2			4		
Sandwich									1
Wax									1
TOTALS -- 539	20	140	2	139	42	11	133	15	37

Table VI. Chemical Blood Analyses

	Phosphorus			Calcium			Magnesium			Carotene			Vitamin A		
	Hi.	Nor.	Low	Hi.	Nor.	Low	Hi.	Nor.	Low	Hi.	Nor.	Low	Hi.	Nor.	Low
Avian			1			1									
Bovine	19	33	69	13	45	23	9	32	6	3	56	150	5	60	147
Equine		2		1	1				1			1			1
Ovine		1	2		1	2		1			1			1	3
Porcine	7	6		4	2	7	1	8	1					2	
Totals:	26	42	72	18	49	33	10	41	8	3	57	151	5	63	151

TOTAL -- 729

Gamma globulin determinations	31
Hemoglobin total determinations	48
Methemoglobin determinations	48
Oxyhemoglobin determinations	28
Serum bilirubin determinations	9
Serum nitrate determinations	5
Sulfahemoglobin determinations	48
Total	217

TOTAL BLOOD CHEMICAL ANALYSES ----- 946

Table VII. Chemical Milk and Cream Analyses

Milk and cream samples	1,234

Table VIII. Chemical Analyses of Water for Livestock Consumption

	FIT	QUESTIONABLE	UNFIT	TOTAL
Water	41	15	31	87

Table IX. Chemical Quantitative Nitrate Analyses

	FIT	QUESTIONABLE	UNFIT	TOTAL
Feeds	156	12	52	220
Water	132	3	9	144
			TOTAL --	364

Table X. Miscellaneous Chemical Analyses

Bovine blood - nitrate	9
Bovine kidney - copper	1
Bovine liver - chloride	1
Bovine liver - cyanide	1
Bovine liver - nitrates	23
Bovine liver - vitamin A	3
Bovine stomach contents - chromate	1
Bovine stomach contents - cyanide	2
Bovine stomach contents - nitrate	2
Bovine stomach contents - phosphate	1
Bovine stomach contents - zinc phosphide	1
Equine liver - chloride	2
Hay - ergot negative	3
Ovine blood - copper	3
Ovine liver - copper	4
Porcine liver - chloride	1
Powder - confirmed copper acetate arsenite	1
Quantitative - selenium solution	1
Quantitative - vitamin A solution	3
Styrofoam - identified	1
Water - petroleum contamination	1
Water - selenium analyses	1
Total	66

TOTAL CHEMICAL ANALYSES -- 3,236

Table XI. Autopsies Performed

Badger	1
Bat	20
Bear	1
Beaver	1
Big Horn Sheep	1
Buffalo	2
Cat	30
Cattle	593
Chicken	134
Chinchilla	6
Chipmunk	1
Coyote	1
Deer	2
Dog	50
Duck	18
Elk	4
Fox	2
Gerbil	1
Goat	3
Goose	4
Gopher	2
Grouse	4
Guinea Hen	5
Guinea Pig	3
Hamster	4
Horse	6
Mouse	8
Muskrat	1
Pheasant	31
Pigeon	1
Rabbit	13
Raccoon	2
Rat	1
Sheep	141
Skunk	19
Squirrel	2
Swine	105
Turkey	5
Total	1,228

TOTAL LABORATORY TESTS	119,122
TOTAL FIELD TESTS	35,434
G R A N D T O T A L	154,556

MILK AND DAIRY INSPECTION DIVISION

Montana licensed milk plants distributed 21,905,840 gallons of pasteurized milk, cream and fluid milk products to Montana consumers during the fiscal year (60,016 gallons daily). Licensed retail raw dairies distributed 355,510 gallons of raw milk during the same period (974 gallons daily). A percentage of 98.74 of the milk, cream and fluid milk products distributed in Montana has the added public health protection of pasteurization. Raw milk accounts for only 1.36% of the total milk supply offered Montana consumers.

The very important responsibility of assuring every man, woman and child that their milk came from healthy cows and is produced, handled and processed under strictly sanitary conditions requires all the livestock disease-control work reviewed in this report. It also requires all of the following listed sanitary inspections and laboratory tests:

1,418	dairy inspections
240	milk plant inspections
2,921	bovine tuberculosis tests
13,411	brucellosis ring tests
4,575	bacterial counts
4,619	antibiotic detection tests
4,593	coliform tests
412	mastitis tests
1,234	chemical analyses
33,423	TOTAL

Tables I and II give the sanitation compliance ratings of the licensed milk plants and dairies in Montana at the end of the fiscal year. It is accepted that to always assure a safe milk supply each milk plant and dairy producer should always maintain a sanitation compliance rating of 90% or higher. It is unfortunate that about six plants in the state have caused the average sanitation rating of all milk plants to be 86% of compliance. Every effort must be made to improve the sanitation practices of those plants and dairies below the 90% rating if Montana consumers are always to be assured a safe milk supply and if the dairy industry is to maintain the consumer confidence it has so justly earned over the years.

Table 1. Sanitation Compliance Scores (Percent Compliance with Montana Livestock Sanitary Board Sanitation Regulations)

Milk Plant	Gallons Sold Daily	Plant Score %	Producer's Score %	Pasteurized Milk Rating
25- 1	3,600	94	93	93
25- 2	3,285	95	92	94
25- 7	1,145	91	90	90
25- 8	100	68	76	72
25-10	6,180	100	94	97
25-11	225	97	90	94
25-13	15	78	94	86
25-14	40	88	95	92
25-15	100	92	95	94
25-16	4,173	91	93	92
25-17	60	90	92	91
25-18	4,800	100	93	96
25-19	1,915	95	85	90
25-20	3,285	91	92	91
25-21	2,681	91	93	92
25-22	102	91	96	94
25-23	138	93	94	94
25-24	140	66	91	84
25-25	2,056	93	94	93
25-28	1,110	90	94	92
25-29	100	86	94	90
25-30	1,410	82	90	86
25-31	1,129	96	89	93
25-32	5,170	92	92	92
25-33	265	84	94	89
25-35	345	70	87	79
25-36	180	86	86	86
25-37	1,645	78	93	86
25-38	3,215	90	89	90
25-39	1,635	81	90	86
25-40	1,230	88	93	91
25-41	360	81	90	86
25-43	128	93	85	89
25-44	2,000	80	90	85
25-45	120	84	85	85
25-46	809	76	84	80
25-47	4,540	83	90	87
25-49	235	90	91	91
25-50	350	57	92	75
TOTAL	60,016	Average 86	Average 89	Average 88

Table II. Sanitation Compliance Scores of Retail Raw Dairies

Dairy	Gallons Sold Daily	Dairy Score %
R- 1	35	96
R- 2	100	100
R- 4	30	93
R- 6	200	76
R- 7	40	95
R- 8	25	94
R-10	40	96
R-11	24	98
R-14	10	92
R-15	77	99
R-19	63	82
R-21	30	91
R-23	65	74
R-24	50	90
R-25	30	86
R-29	50	96
R-30	56	78
R-31	14	94
R-32	35	79
	974	Average 89.9

Chemicals in agriculture have found a way of getting into milk supplies through various routes. This has made it necessary that the laboratory be supplied essential equipment to test milk samples for the presence of such adulterants as modern insecticides and pesticides. The legislature provided modest sums to purchase capital item laboratory equipment to perform these tests. It is hoped that during the coming year the equipment can be installed and sufficient laboratory help can be trained to perform these detection tests, thereby providing additional safeguards for human health and providing additional assistance to the milk distributor and producer in their efforts to sell only a safe product.

During the spring of 1965 the Board participated in the "Palanquin Event" starting April 14, 1965. Selected representatives of this department have been appointed to collect milk samples for the detection of radionuclides in milk by Radiological Health Laboratories of the USPHS in case of emergencies. The "Palanquin Event" activated this collection of samples for the "Standby Off-Site Milk Surveillance" program. One hundred sixty-one milk samples were collected from 14 plants in all areas of Montana and submitted to the Southwestern Radiological Health Laboratory at Las Vegas, Nevada.

The results showed that radionuclides, wherever detectable, were extremely low in the milk collected in Montana in comparison to the safe limits recommended by the Federal Radiation Council for general public use.

Dairy and milk plants licensed during the fiscal year were:

471 Producer dairies
19 Retail raw dairies
43 Milk plants

MEAT AND SLAUGHTERHOUSE INSPECTION DIVISION

Slaughterhouse Inspection -- Livestock Sanitary Board licenses were issued to 61 slaughterhouses, 3 meat depots, 7 meat packing houses and 4 poultry slaughterhouses during the fiscal year. Ninety-six sanitary inspections were made on the above licensed premises.

Meat Inspection -- The Livestock Sanitary Board maintains meat inspection in 17 slaughtering establishments as follows:

Establishment Number	Name	Address
2	John R. Daily, Incorporated	Missoula
3	Schramm Packing Co.	Missoula
5	Montana Meat Company of Helena	Helena
7	Vandevanter Meats	Columbia Falls
8	Barsotti Bros. Meat Packing Plant	Great Falls
10	Quick Freeze Packing Co.	Livingston
12	Havre Abattoir	Havre
13	Biastoch Meats, Inc.	Butte
14	Vollmer & Sons, Inc.	Bozeman
16	Roberts Packing Plant	Dillon
18	Mickey's Packing Plant	Great Falls
19	New Butte Butchering Co.	Butte
21	Rocky Mountain Packing Co., Inc.	Havre
22	Timberland Packing Co.	Lewistown
23	Montana State College	Bozeman
26	Miles City Packing Company	Miles City
27	Triangle Packing Company	Choteau

The USDA maintained federal meat inspection in 7 slaughtering establishments as follows:

301	Great Falls Meat Company	Great Falls
317	Austin Packing Co.	Glasgow
339	Midland Empire Packing Co.	Billings
476	Circle K Packing Co.	Kalispell
691	Pierce Packing Co.	Billings
857-G	Needham Packing Corp. of Montana	Great Falls
901-A	Sigman Meat Co.	Butte

Thirty-four slaughtering establishments operated in Montana without meat inspection during the fiscal year.

The number of animals slaughtered in the various slaughterhouses during the fiscal year was:

	Six Plants Federal Meat Insp.	Seventeen Plants State Meat Insp.	Thirty-four Plants Without Meat Insp.
Cattle	129,473	44,254	13,473
Calves		1,740	260
Sheep		4,681	219
Swine	197,533	65,536	12,831
TOTALS:	327,006	116,211	26,783

A total of 470,000 animals was slaughtered in licensed establishments last year. Of the total, 70% were slaughtered in the six plants under federal meat inspection, 25% were slaughtered under state meat inspection, and 5% were slaughtered without meat inspection.

Following is the number of entire carcasses found unfit for food under meat inspection:

Number of Animals			
State Insp.	Federal Insp.		Estimated Dressed Weight
152	432	Cattle	321,200 pounds
6		Calves	1,200 "
4		Sheep	141 "
148	353	Swine	93,186 "
TOTAL 1,095			415,727 pounds

The following parts of animals were found unfit for food under state and federal meat inspection:

Number of Parts		Estimated Weight
23,113	Cattle	46,226 pounds
32	Calves	64 "
851	Sheep	1,702 "
58,533	Swine	58,533 "
TOTAL 82,529		106,525 pounds

Beef livers condemned:

		Estimated Weight
State Insp.	13,391	133,910 pounds
Fed. Insp.	40,834	408,340 "
TOTAL	54,225	542,250 pounds

Swine livers condemned 31,615 pounds

This represents a total estimate of 1,074,717 pounds of meat found totally unfit for human consumption and removed from food channels in Montana during the year.

A total of 62 diseases and other conditions was found in the animals slaughtered under state meat inspection which caused the entire animal or part to be unfit for human consumption resulting in condemnation of that carcass or part. The disease condition found and number of condemnations are shown in Tables I and II.

Table I. Summary of Post-Mortem Inspection (State Inspection Only)

SPECIES	CATTLE	SWINE	CALVES	SHEEP
Food	44,102	65,388	1,734	4,677
Condemned	152	148	6	4
TOTAL	44,254	65,536	1,740	4,681

Table II. Disposition of Carcasses and Parts

DIAGNOSIS	CATTLE		SWINE		CALVES		SHEEP	
	Cond.	Parts Cond.	Cond.	Parts Cond.	Cond.	Parts Cond.	Cond.	Parts Cond.
Abscesses	2	459	19	2846		15	1	22
Actinobacillosis		1						
Actinomycosis		339	1	1		2		
Anasarca	1							
Anemia	1		1					
Arthritis	1	1	6	7				
Ascites	1							
Atrophic rhinitis				4				
Auto-intoxication	1							
Bruises, injuries, etc.	11	444	6	332		6		2
Cachexia	45	1	10		2		1	
Caseous lymphadenitis								381
Contamination	3	55		784				
Cysticercus tenuicollis				2				25
Distomiasis						2		11
Edema	5				2			
Emphysema			1					
Endocarditis		1						
Enteritis	1		5					
Epithelioma of eye	14	133		4				
Fetid odor	1							
Heads, unclean				151				
Hydronephrosis	1		1	12				
Icterus	2		40				1	
Keratitis		9				6		
Kidneys				2				
Leptospirosis			1					
Liposarcoma	1							
Liver, misc. lesions		1		23130				116
Liver, telangiectasis						1		199
Mastitis	2							
Metritis	2							
Moribund	3							
Myocarditis		1	1					
Nephritis	3		1					
Pericardial adhesions		35		1				
Peritonitis	7		3					
Pleuritis	1		1					
Pneumonia	9		30	2	1			1
Porcupine quills		1						
Pyelonephritis	5		3					
Pyemia	2		1					

Table II. (Continued)

DIAGNOSIS	CATTLE		SWINE		CALVES		SHEEP	
	Cond.	Parts Cond.	Cond.	Parts Cond.	Cond.	Parts Cond.	Cond.	Parts Cond.
Sarcosporidiosis	3							
Septicemia	12		15		1			1
Septic fracture	1							
Sexual odor			1					
Taeniasis								92
Traumatic pericarditis	5	154		757				1
Tuberculosis		1		1335				
Tumor	2		1				1	
Uremia	2							
Urinary Calculi	2							
TOTALS:	152	1636	148	29,370	6	32	4	851

BEEF LIVERS CONDEMNED:

Abscesses	9,353
Cirrhosis	127
Telangiectasis	182
Sawdust	484
Carotenosis	15
Distomiasis	1,721
Echinococcosis	6
Parasites (flukes)	870
Miscellaneous	631
Contamination	2
TOTAL	13,391

The 39th Legislative Assembly provided additional funds to establish and carry out processing and labeling meat inspection for the coming biennium. This will apply to areas now requiring that only inspected and passed meat and meat products be sold. Reorganizations and plans have been completed to inaugurate this phase of meat inspection starting July 1, 1965, when the funds become available.

RENDERING PLANTS

Thirteen rendering plants were issued licenses by the Livestock Sanitary Board during the year. Sixteen plant and facility rendering plant inspections were made to determine compliance with the provisions of the regulations contained in Chapter 25.

During the year meat meal samples were collected from each rendering plant at various sites of manufacture and submitted to the laboratory for examination for contamination with Salmonella organisms. Thirty-five samples were submitted. All samples were negative except three samples submitted from two rendering plants. Salmonella derby, Salmonella infantis and Salmonella orion were isolated from the three samples. Sanitation procedures must be employed in rendering plants to prevent cross-contamination of the finished meat meal product.

The reports from the eastern part of the United States that meat from dead animals was finding its way into human food and the possibility of this meat originating from the West caused all rendering plants to be placed under surveillance. We are happy to report that there was no evidence that licensed Montana rendering plants were in any way participating in this enterprise.

SWINE GARBAGE-FEEDING ESTABLISHMENTS

Under the provisions of Section 46-2602 (RCM 1947), 16 garbage-feeding establishments were issued licenses during the year. This is a decrease of 6 from the previous year.

With the USDA cooperating, 425 garbage-feeding establishment inspections were made to determine compliance with the requirements of the regulations contained in Chapter 16.

ARTIFICIAL INSEMINATION

Artificial inseminators' licenses were issued or renewed to 174 persons in accordance with Montana laws contained in Chapter 25 (RCM 1947).

In accordance with the provisions of Chapter 25 (RCM 1947) and Regulation 1523, permits were granted to 8 bull studs to ship bovine semen into Montana to be used for artificial insemination.

LITIGATION

On September 19, 1964, the Justice Court in Flathead County found Henry Siderius guilty of selling milk without a Livestock Sanitary Board license as required by Section 46-232 (RCM 1947).

REGULATIONS

The following official regulations were revised during the fiscal year:

Regulation 1516 -- Importation of Dogs.
Regulation 1007 -- Swine Sold from Public Stockyards.
Regulation 1008 -- Official Hog Cholera Vaccination.
Regulation 1009 -- Use of Virulent Hog Cholera Virus and Modified Live-Virus Vaccine.
Regulation 1522 -- Importation of Swine.
Chapter 3, Regulations 301 through 314 -- Brucellosis.

ORDERS

The following official order was issued during the fiscal year.

Order No. 208 -- Placing the City of Bozeman under Rabies Quarantine.

COOPERATING AGENCIES

The Montana Livestock Sanitary Board's duties and responsibilities are accomplished through the cooperation, advice and assistance of many. To the following we express our sincere thanks.

1. Agricultural Research Service, U.S. Department of Agriculture, and Dr. O. J. Halverson, who is in charge of their Montana activities.
2. Montana Veterinary Research Laboratory, Bozeman.
3. Rocky Mountain Laboratory, Hamilton.
4. Montana State Board of Health.
5. U.S. Public Health Service.
6. Montana Agricultural Extension Service.
7. City and county health departments.
8. Montana Stockgrowers Association.
9. Montana Wool Growers Association.
10. Montana milk distributors.
11. Montana milk producers.
12. Montana hatcherymen.

FINANCIAL STATEMENT

FUNDS AVAILABLE 7-1-64				
General Fund	APP.#			
Operation (Cash Bal. 6-30-64)	647-2	$ 4,944.80		
Operation Appropriation	647-2	182,370.00		
Capital (Cash Bal. 6-30-64)	647-3	483.16		
Capital Appropriation	647-3	4,900.00		
Grants & Ben. (Cash Bal. 6-30-64)	647-4	465.17		
Grants & Ben. Appropriation	647-4	10,000.00		
Meat Inspection (Cash Bal. 6-30-64)	647-6	5,441.41		
Meat Inspection Appropriation	647-6	66,180.00		
			$274,784.54	
LSB Earmarked Revenue Fund (Account 215100)				
Operation (Cash Bal. 6-30-64)	302-1	25,038.89		
Operation Appropriation	302-1	114,988.00		
Total			140,026.89	
Total All Funds Available				$414,811.43
EXPENDITURES - 1964-65				
General Fund				
Operation	647-2	$144,859.85		
Operation (Encumbered)	647-2	2,057.56		
Capital	647-3	5,344.92		
Capital (Encumbered)	647-3	26.00		
Grants & Benefits	647-4	10,414.88		
Meat Inspection	647-6	71,533.39		
Total			$234,236.60	
LSB Earmarked Revenue Fund (Account 215100)				
Operation	302-1	$139,967.75		
Total			139,967.75	
Total All Expenditures				$374,204.35
BALANCES - 6-30-65				
General Fund (Reverts to General Fund)			$ 40,547.94	
LSB Earmarked Revenue Fund (Reverts to LSB)			59.14	
Total Reversions				$ 40,607.08

LSB EARMARKED REVENUE FUND - ACCOUNT 215100

CASH BALANCE 7-1-64	$ 40,723.11		
Income - Matured U.S.Government Bonds	10,000.00		
- Interest on U.S.Government Bonds	552.00		
-*Livestock Taxes	128,006.59		
Total Cash Balance & Income		$179,281.70	
Expenditures			
Operation - (Appropriation 302-1)	$139,967.75		
Total Expenditures		139,967.75	
Balance			$ 39,313.95
Plus Reserve in U.S. Government Bonds			20,000.00
CASH BALANCE 6-30-65			$ 59,313.95

LSB EARMARKED REVENUE FUND - ACCOUNT 215000

**Reserve in U.S. Government Bonds (Including Interest)	$ 89,620.86
***License Fees Collected 1964-65	2,350.00

*3 mills on cattle and sheep.

**Reserve for emergency use in controlling dangerous disease outbreaks.

***Submitted to State of Montana General Fund.

SUMMARY OF MAJOR ACTIVITIES DURING THE FISCAL YEAR

Dairy and Milk Plant Inspections	1,658
Slaughterhouse Inspections	96
Rendering Plant Inspections	16
Cattle Backtagged	129,096
Animals Tested for Brucellosis	79,665
Animals Tested for Tuberculosis	11,587
Ante-mortem and Post-mortem -- Meat Inspection	116,211
Animals Inspected at Livestock Markets	1,124,244
Animals Inspected for Interstate Shipment	1,248,807
Miscellaneous Animal Inspections	210,161
Pullorum-typhoid Tests	34,680
Laboratory Tests	119,122
TOTAL TESTS, ANALYSES AND INSPECTIONS	3,075,343

Licenses Issued:

Dairies and Milk Plants	533
Slaughterhouses	61
Meat Packing Plants	7
Meat Depots	3
Poultry Slaughterhouses	4
Rendering Plants	13
Garbage-cooking Establishments	16
Artificial Inseminators	174
TOTAL	811

LIVESTOCK SANITARY BOARD STAFF

The demands of government and industry for scientists in veterinary medicine continue to increase. The prospect for the next ten years that Colleges of Veterinary Medicine will not be able to meet these increasing demands leaves the prospect of maintaining an adequate Livestock Sanitary Board scientific staff to safeguard the health of Montana's greatest industry and to assure Montana people a safe meat and milk supply a most difficult one. It is a problem that must be faced. We dare not lower scientific standards in this most important work.

I sincerely hope this annual report reflects the good work of the Livestock Sanitary Board staff in the field, in the laboratories and in the office. It is again my privilege to recommend to the Livestock Sanitary Board their commendation to the entire staff for their accomplishments during the year.

Respectfully submitted,

J. W. SAFFORD
Executive Officer and
State Veterinarian

INDEX

Artificial Insemination 40

Cooperating Agencies 41

Diagnostic Laboratory Division 16
- Autopsies 32
- Bacteriology 17
- Chemical 30
- Parasitology 17
- Pathology 17
- Serology 29

Finances 42

Importation Report 14

Litigation 40
Livestock Disease Control Division 3
- Cattle 3
- Dog 10
- Horse 10
- Poultry 10
- Sheep 8
- Swine 9
- Veterinarians' Report 11
- Wild Animal 10

Livestock Importations 13
Livestock Markets 13
Livestock Sanitary Board Staff 44

Meat and Slaughterhouse Inspection Division 36
Milk and Dairy Inspection Division 33

Orders Issued 41

Regulations 41
Rendering Plants 40

Summary of Major Activities During the Fiscal Year 43
Swine Garbage-Feeding Establishments 40

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